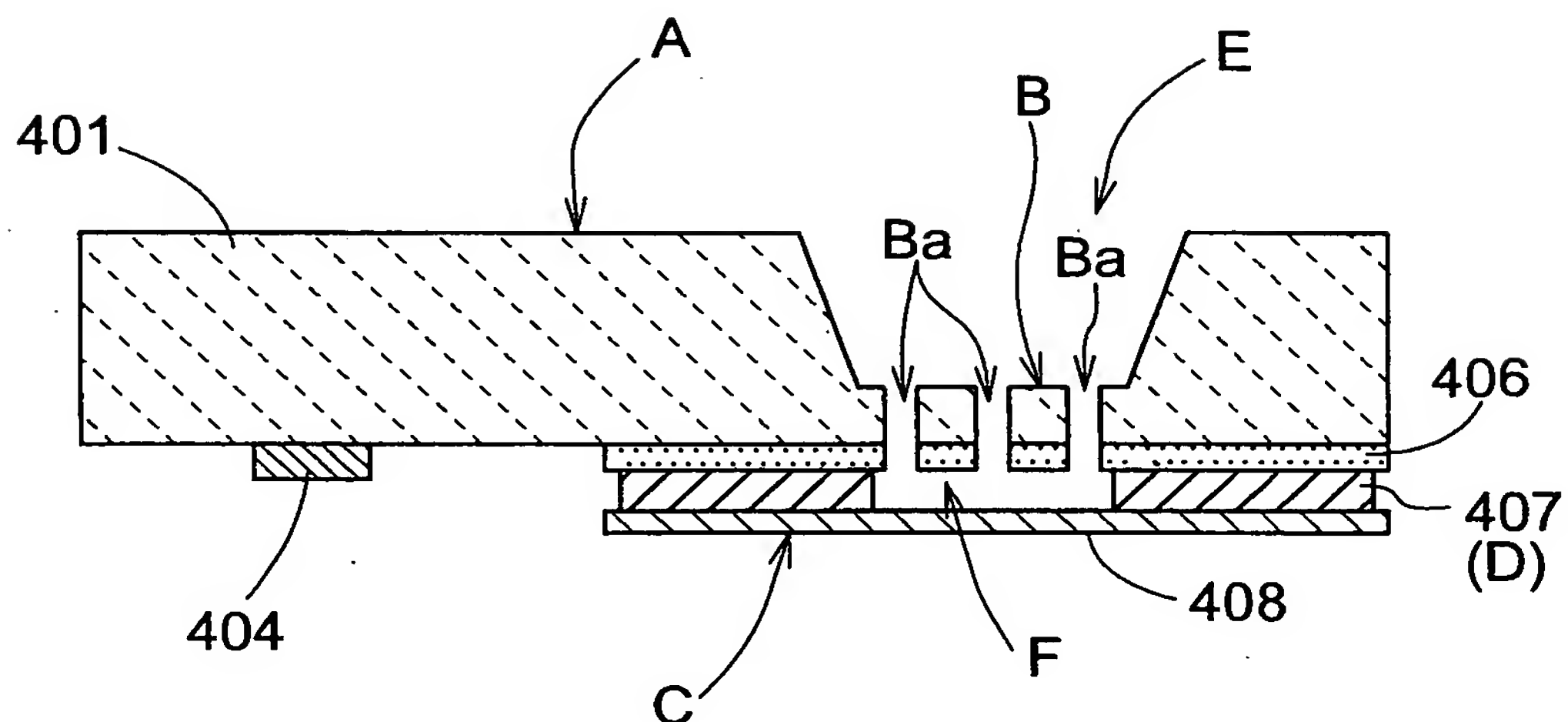


FIG.1



A: substrate
 B: back electrode
 Ba: perforations
 (acoustic holes)
 C: diaphragm
 D: spacer
 E: acoustic opening
 F: void area

401: silicon substrate
 404: electrode portion
 406: second protective film
 407: sacrificial layer
 408: metal film

FIG.2

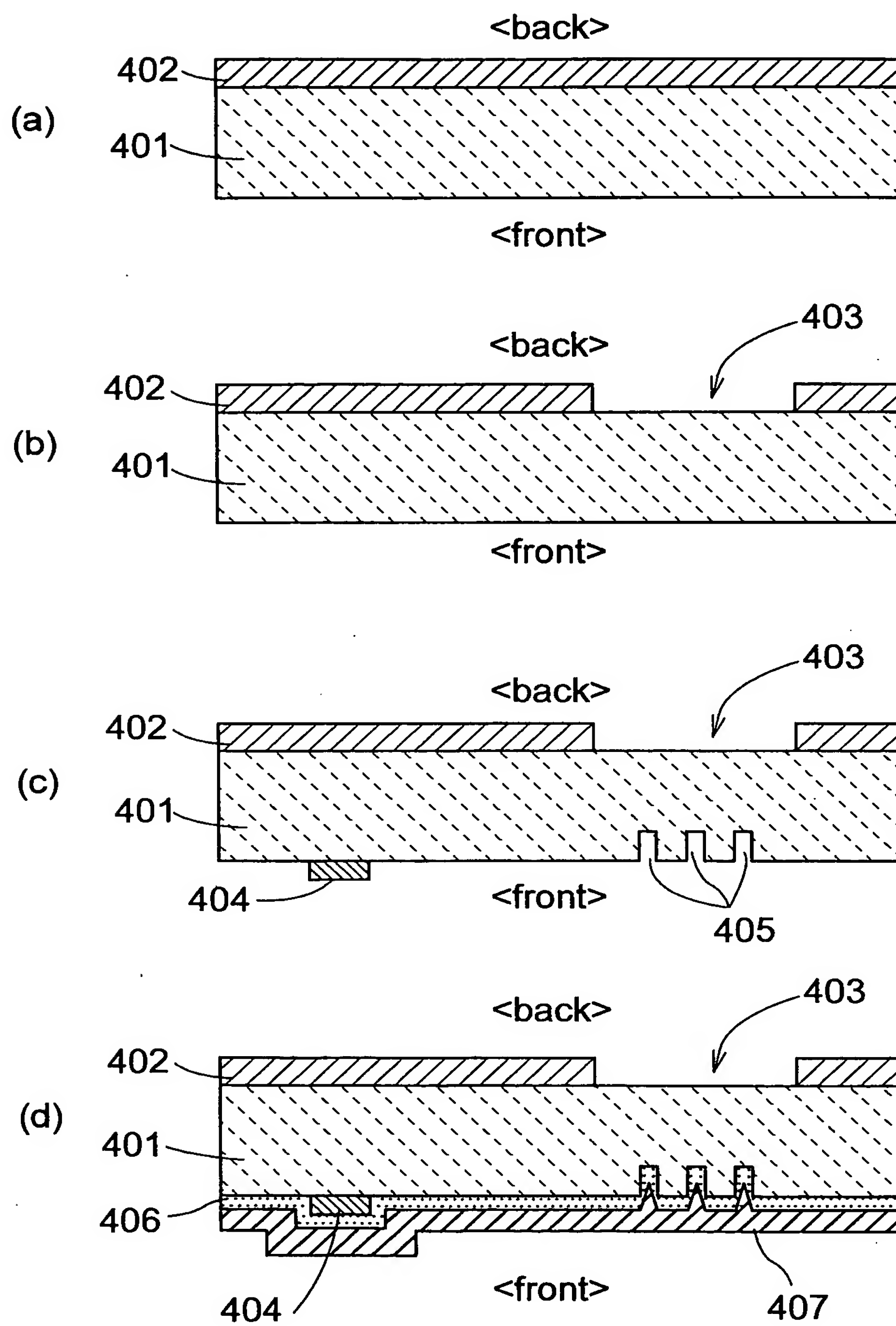


FIG.3

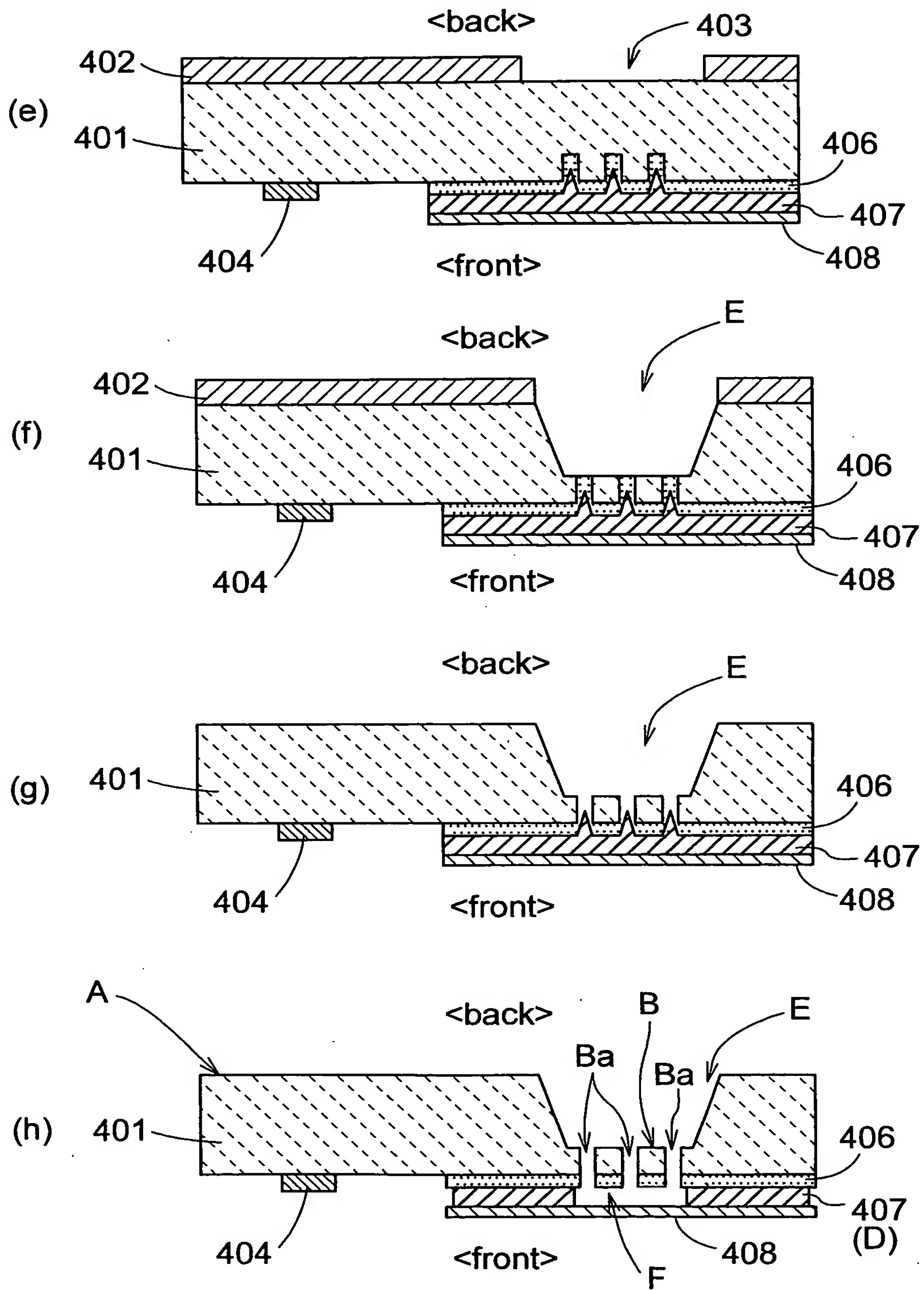
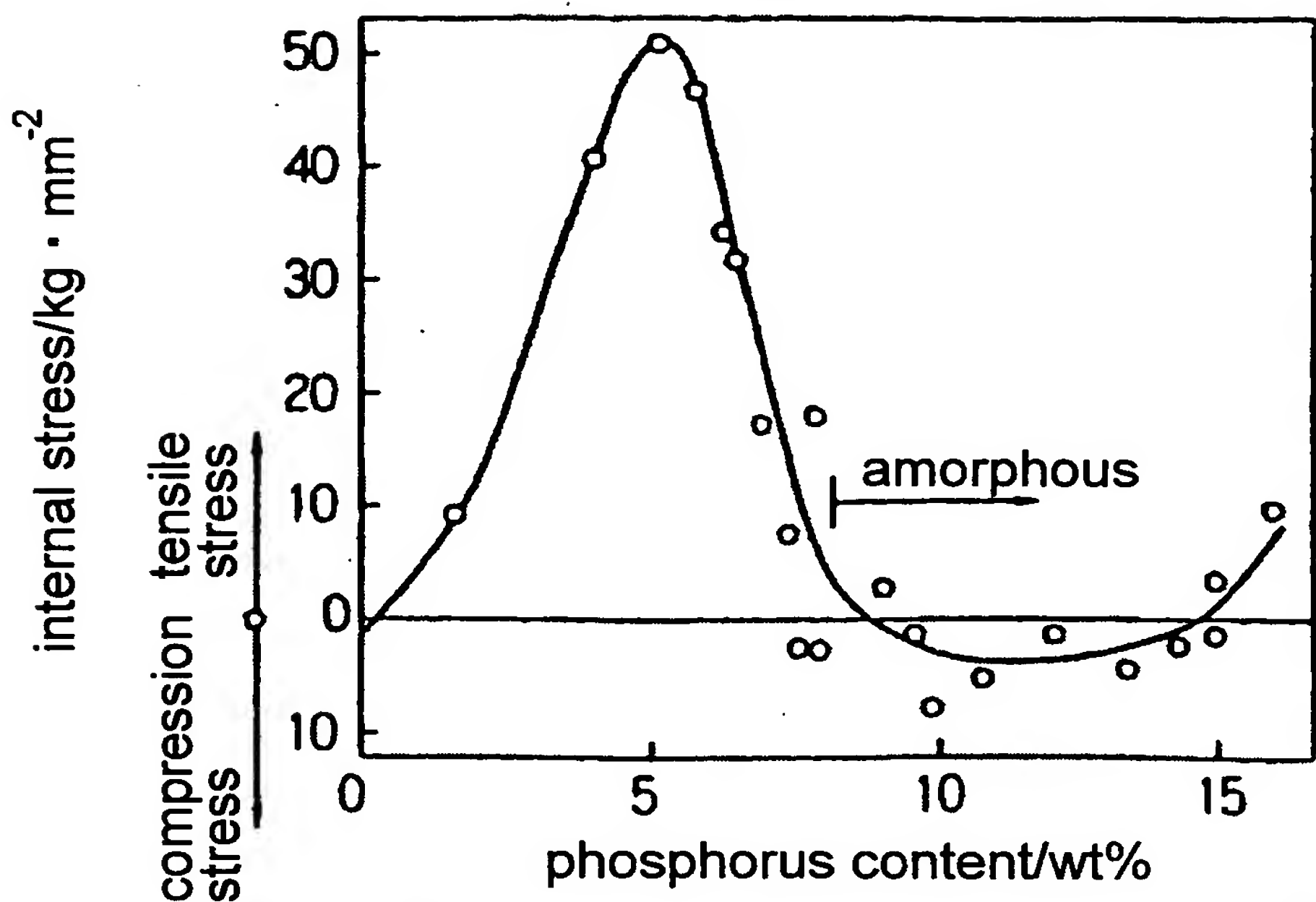
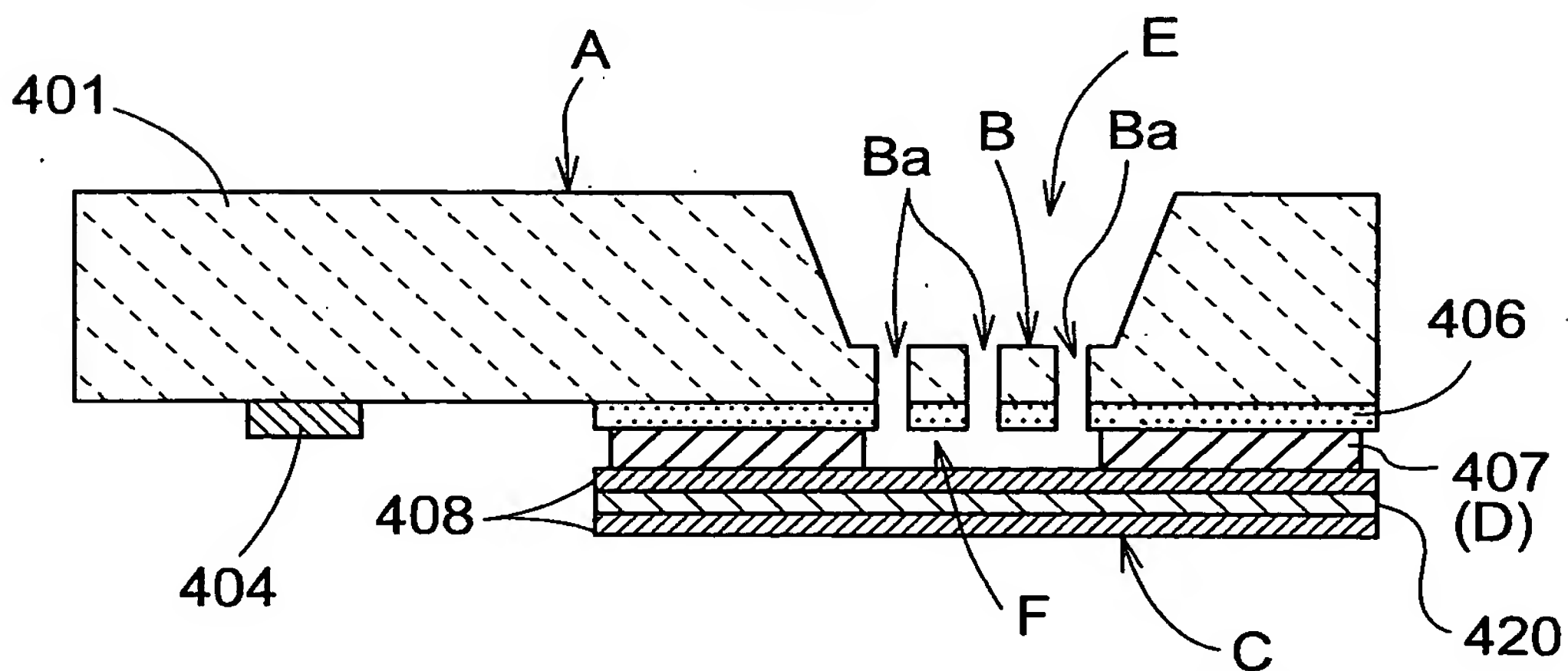


FIG.4



relationship between phosphours content
and internal stress

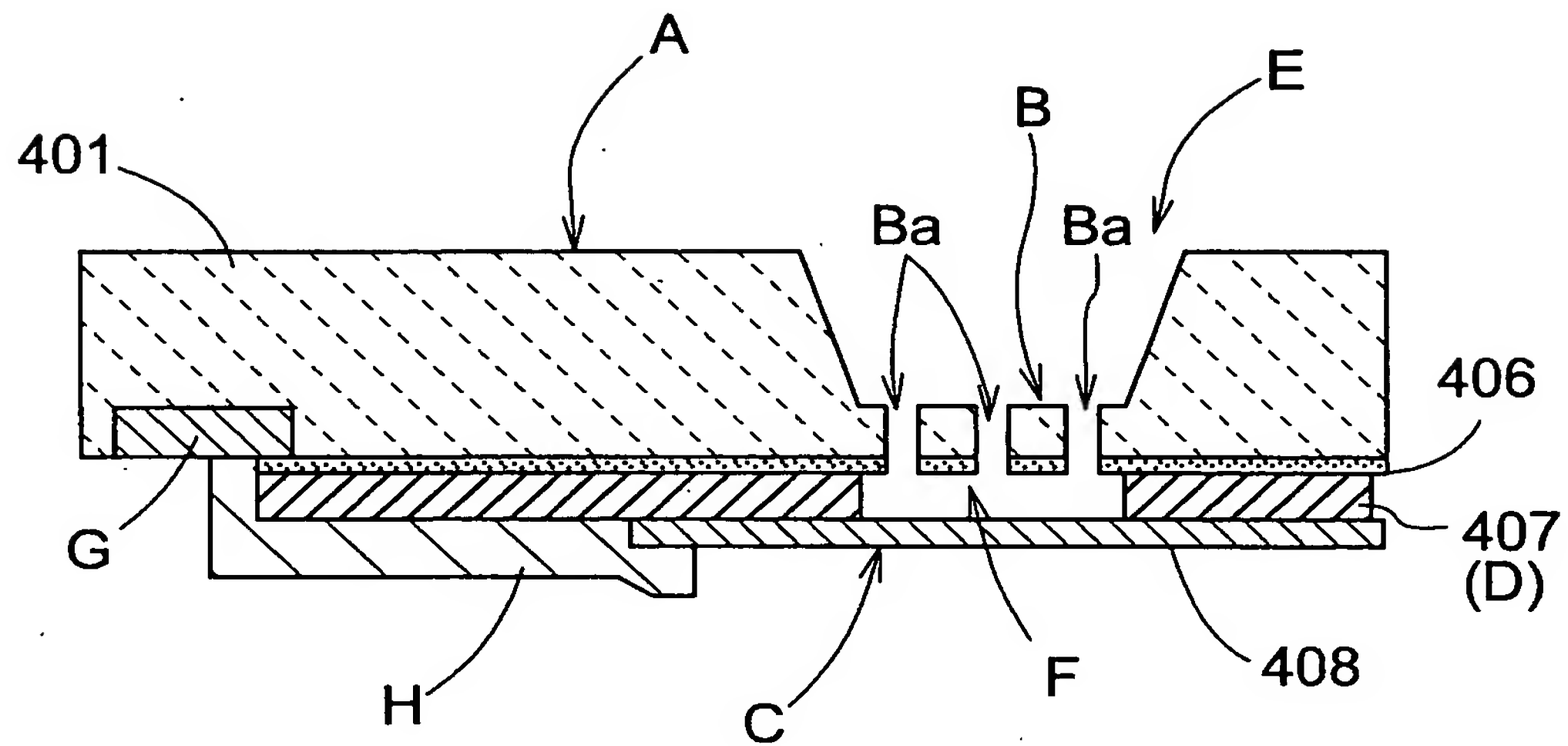
FIG.5



A: substrate
B: back electrode
Ba: perforations
(acoustic holes)
C: diaphragm
D: spacer
E: acoustic opening
F: void area

401: silicon substrate
404: electrode portion
406: second protective film
407: sacrificial layer
408: metal film
420: base layer

FIG.6



A: substrate

B: back electrode

Ba: perforations
(acoustic holes)

C: diaphragm

D: spacer

E: acoustic opening

F: void area

G: integrated circuit

H: wiring

401: silicon substrate

406: second protective film

407: sacrificial layer

408: metal film

FIG.7

PRIOR ART

